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| EXAMINER SCHLENTZ, NATHAN W | | | | |
| ART UNIT 1616 | | PAPER NUMBER | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/512,059

Applicant(s)

PATEL ET AL.

Examiner

Nathan W. Schlientz

Art Unit

1616

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 9-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 9-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of the Claims

Claims 1-3, 5 and 9-36 are pending in the present application and examined herein on the merits for patentability. No claim is allowed at this time.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1,148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claims 1-3, 5 and 9-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Mulla (US 3,846,557), Lloyd et al. (Management of Fruit flies in the Pacific – ACIAR Proceedings, 1997) and Baumgaertner (DE 197 49 683 A1), as evidenced by the instant specification.

Determination of the scope and content of the prior art

(MPEP 2141.01)

Mulla et al. teach a bait formulation utilized for controlling synanthropic flies. Mulla et al. teach that a primary object is to provide a dry formulation which can be mixed with an insecticide and which will attract synanthropic flies for along time (col. 2, ln. 6-9), wherein the bait formulation comprises a dry, fermented protein source (col. 2, ln. 13-16). Mulla et al. further teach that any protein material can be utilized and, specifically, the proteins which they have utilized successfully include autolyzed yeast (col. 4, ln. 51-55). The protein material may be added to a sorbtive material, such as sodium bentonite and diatomaceous earth, which totally absorbs the water (col. 7, ln. 45 to col. 8, ln. 12).

Lloyd et al. teach brewery waste yeast being converted to a protein bait for fruit fly control (Abstract). Lloyd et al. teach that in Australia, an autolyzed protein bait, a by-product of yeast manufacture for the food industry, is widely used for fruit fly control (pg. 192, right column, 1st paragraph). Lloyd et al. further teach that yeast autolysate generally refers to products in which yeast cells have been disrupted by some process other than acid hydrolysis and released cell proteins have been degraded enzymatically. Yeast protein autolysates do not have a high salt content and are less likely to cause phytotoxic effects when applied to foliage as a fruit fly bait. Furthermore, for yeast autolysates to be used as protein baits, it is not necessary to remove all of the cell wall debris and the process may be much simpler than those employed in the preparation of yeast extract for the food industry (whole paragraph bridging pg. 192 to

193). Lloyd et al. teach autolyzing brewery waste yeast, prepared by concentration by heating followed by proteolysis with the enzyme papain and preservation with potassium sorbate (pg. 196, left column, 2nd paragraph).

Baumgaertner teaches an insecticide comprising a synthetic silicic acid, Aerosil 200 Hydrophil, at least one baiting substance, such as yeast powder or protein, and a preservative (methylparaben) (Abstract). Baumgaertner further teaches that silicic acid possesses an insecticidal effect (pg. 1, ln. 15).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Mulla et al. do not teach utilizing a synthetic silicic acid in their bait preparations; Lloyd et al. do not teach addition of synthetic silicic acids to their protein bait preparations; and Baumgaertner do not specifically teach the yeast powder to be autolyzed yeast.

However, Mulla et al., Lloyd et al. and Baumgaertner combined clearly teach that protein autolysates are suitable for use in insect bait preparations, and synthetic silicic acids are also suitable for use in bait preparations and provide an insecticidal effect.

The instant specification teaches protein autolysates are derived from yeasts of the species *Saccharomyces cerevisiae* and *Saccharomyces carlsbergensis*, such as liquid [®]Pinnacle protein autolysate (obtained from brewery yeast residues after fermenting with papain enzyme, EC 3.4.4.10; Mauri Yeast Australia Ltd., Toowoomba, Queensland, Australia) and/or pulverulent [®]SPA400 protein autolysate (obtained from brewery yeast residues; Halcyon Proteins Pty Ltd., Melbourne, Australia) (pg. 6, ln. 2-8).

The instant specification further teaches that pyrogenic silicic acids include [®]Aereosil 200 (pg. 6, ln. 9-18).

Finding of prima facie obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time of the invention to use protein autolysates from Brewery waste yeast (*Saccharomyces*) in combination with synthetic silicic acids ([®]Aerosil 200) and an insecticide to control synanthropic flies, such as fruit flies.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments filed 24 September 2010 have been fully considered but they are not persuasive.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant further argues that the combination of Mulla et al. and Lloyd et al. does not suggest a combination comprising synthetic silicic acids. The examiner respectfully argues that Baumgaertner teaches silicic acid comprises insecticidal activity and is suitably combined with an attracting bait, such as yeast. Therefore, it would have been obvious for one of ordinary skill in the art to add silicic acid to the bait of Mulla et al. which comprises a protein bait, such as autolyzed yeast, to attract synanthropic flies and an insecticide to kill the flies after they are attracted to the bait.

Applicant then argues that Baumgaertner read as a whole teaches away from the proposed combination because the object of Baumgaertner was to provide an insecticidal composition suitable for use in the home which was free from conventional insecticides that are unsafe or undesirable for use in the home. The examiner respectfully argues that, as noted by applicant, Mulla et al. teach a dried bait comprising fermented or decayed protein, such as autolyzed yeast, which can be mixed with an insecticide for controlling synanthropic flies, house flies, blow flies, fruit flies, ear wigs, ants and eye gnats. Baumgaertner teaches an insecticide made from a combination of silicic acid and/or silicate and a baiting substance which may be yeast. Therefore, Mulla et al. and Baumgaertner each teach insecticides comprising a bait, such as yeast, and an insecticide. It would have been obvious to prepare an insecticide that comprises the yeast bait and insecticide of Mulla et al. as well as the yeast bait (i.e. same yeast bait as Mulla et al.) and insecticide (silicic acid or silicates) of Baumgaertner.

Such would have been obvious in the absence of evidence to the contrary because it is generally prima facie obvious to use in combination two or more ingredients that have previously been used separately for the same purpose to form a third composition useful for that same purpose. The idea of combining them flows logically from their having been taught individually in the prior art. *In re Kerkhoven* 626 F.2d 646, 850, 205 USPQ 1069, 1072 (CCPA 1980).

Also, it would have been obvious to add the silicic acid of Baumgaertner to the bait and insecticide preparation of Mulla et al. because Baumgaertner teaches that silicic acid has an insecticidal effect by absorbing the water from the insect, which is effective against ants, wood lice, aphids, cockroaches, slugs, silverfish, flies and wasps. Therefore, addition of an additional insecticide, silicic acid, to the insecticidal bait preparation of Mulla et al. would enhance the insecticidal efficacy of the bait preparation of Mulla et al. by providing a more comprehensive insecticidal effect.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan W. Schlientz whose telephone number is (571)272-9924. The examiner can normally be reached on 9:00 AM to 5:30 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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NWS

/John Pak/
Primary Examiner, Art Unit 1616